What is claimed is:

- A cassette for accommodating a stimulable phosphor sheet, comprising:
 - a front cover; and
- a back base having an inner surface on which the stimulable phosphor sheet is attached, wherein the front cover is placed so as to cover the inner surface of the back base and is separably re-assembled with the back base so as to form the cassette;

wherein the back base is attracted to a rigid plane in such a way that the back base surface is brought in contact with the rigid plane.

- 2. The cassette of claim 1, wherein at least a part of the reverse side of the back base is a ferromagnetic body and the attraction of the back base onto the rigid plane is conducted by a magnetic force.
- 3. The cassette of claim 1, wherein the attraction of the back base onto the rigid plane is conducted by a suction force.

- 4. The cassette of claim 1, wherein when the back base is attracted to a rigid plane in such a way that the back base surface is brought in contact with the rigid plane, the back base has a flexibility to follow the flatness of the rigid plane.
- 5. The cassette of claim 1, wherein one of the stimulable phosphor sheet and the plate on which the stimulable phosphor sheet is attached, is adhered on the inner surface of the back base by a two-sided adhesive tape or adhesives so as to be changeable.
- 6. The cassette of claim 1, wherein one of the stimulable phosphor sheet and the sheet on which the stimulable phosphor sheet is adhered, is attached on the inner surface of the back base with a magnetic force.
- 7. The cassette of claim 1, further comprising a locking mechanism that is capable of maintaining a lock-ON condition and a lock-OFF condition alternately.
- 8. The cassette of claim 7, wherein the locking mechanism is comprised of a plurality of locking claws, wherein the

lock-ON condition is realized when tips of the plurality of locking claws are protruded from the side surface of the back base main body, and the lock-OFF condition is realized when the tips of the plurality of locking claws are not protruded from the side surface of the back base main body.

- 9. The cassette of claim 7, wherein the locking mechanism is comprised of a plurality of locking claws which move to slide on the back base while keeping tips of the claws extruding from the side surface of the back base main body.
- 10. The cassette of claim 9, wherein the rocking claws are provided on at least a pair of side surfaces facing each other of the back base.
- 11. The cassette of claim 1, wherein a protruded portion is provided on an outer peripheral portion of the back base, a recessed portion is provided on a frame of the front cover, and when the front cover and the back base are re-assembled together, the protruded portion provided on the outer peripheral portion of the back base enters into the recessed portion on the frame of the front cover so as to shield light coming from outside.

- 12. The cassette of claim 1, wherein a protruded portion is provided on a frame of the front cover, a recessed portion is provided on an outer peripheral portion of the back base, and when the front cover and the back base are re-assembled together, the protruded portion provided on the frame of the front cover enters into the recessed portion on the outer peripheral portion of the back base so as to shield light coming from outside.
- 13. The cassette of claim 1, wherein an inner surface of the frame of the front cover has a slope inclined upward from the outer peripheral portion toward the inside.
- 14. The cassette of claim 13, wherein when the front cover and the back base is re-assembled together, a clearance of 0.2 to 2.0 mm is generated between the inner surface of the frame of the front cover and the side surface of the outer wall of the back base.